

2021

**Your Trust is our Drive**  
Since 1956

# YOUR TRUST IS OUR DRIVE

**Spiro International S.A. is the undisputed world leader in the development and manufacture of machines for the production of air duct systems required in the HVAC and sheet metal industry.**

Our business principle is to support the improvement of indoor air quality by providing machines and solutions used to produce economical and environmentally-friendly air duct systems.

As the inventor of the spiral duct machine – the so called Tubeformer – we have built a sound reputation in the HVAC and sheet metal industry over the last six decades. With thousands of high-quality sheet metal machines delivered across the globe we have developed a strong relationship with our customers – worldwide.

What once started as a Tubeformer manufacturing company has transformed into a fully-fledged organization that encompasses the entire range of round and rectan-

gular ducting equipment, as well as customized solutions for the ventilation industry.

Headquartered in Bödingen, Switzerland, Spiro® offers direct access to our competence centre where our machines can be seen in action or inspected prior to shipment, as well as gain insight to our R&D centre. Moreover, with our subsidiary in North America plus a global network of sales partner we provide local expertise and underline Spiro®'s global holistic approach.

Spiro® stands for state-of-the-art machinery and world class service and support built on long-standing collaboration with our customers.



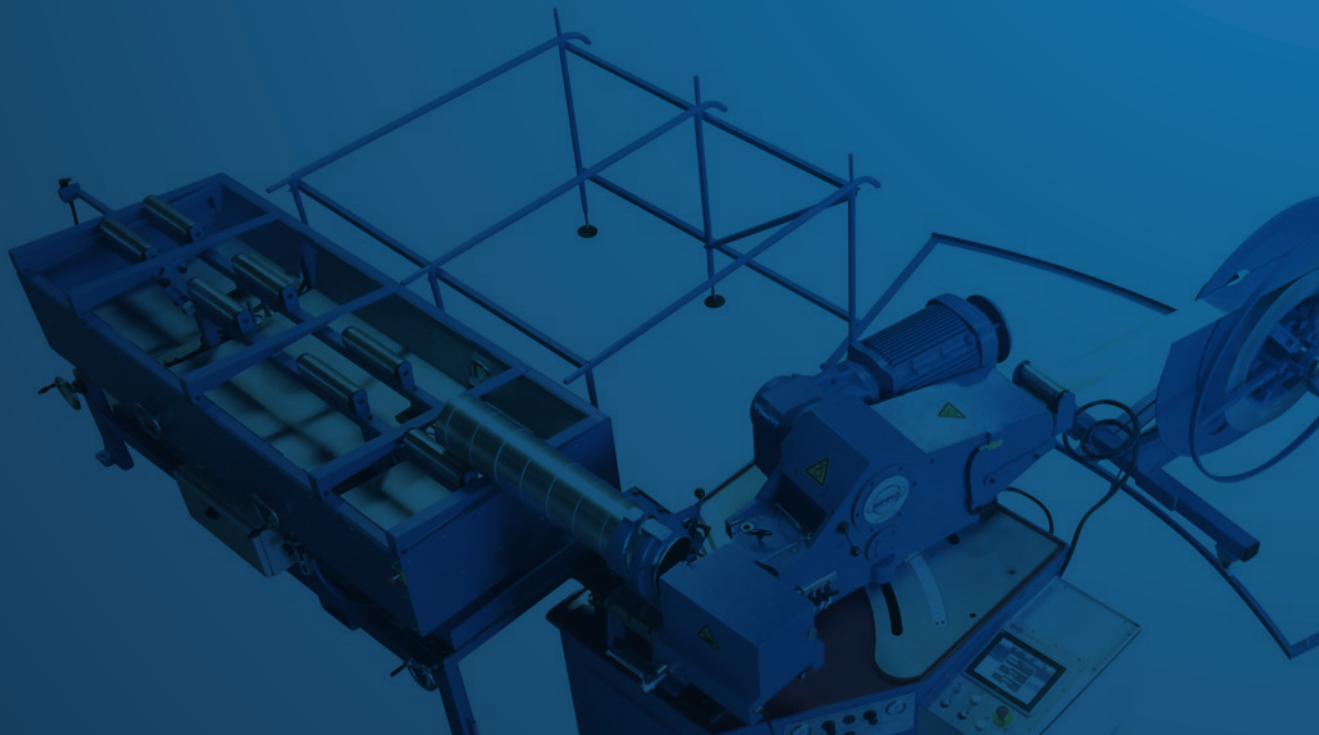
**Spiro® – The Invention**



**Spiro® – Global Presence**



**Spiro® – Your Partner**





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# TUBEFORMER 1602 / 3600 – MODULAR EDITION

**The world’s most sold Tubeformer has been reinvented.**

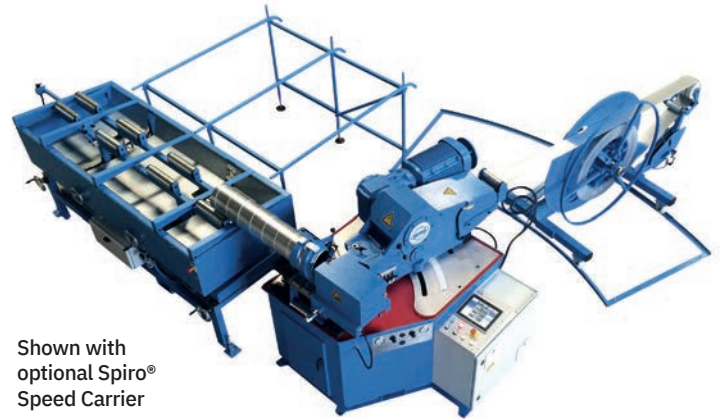
The prestigious Tubeformer 1602 / 3600 has been widely recognized in the HVAC and sheet metal industry as the spiral duct machine with outstanding quality, reliability, and performance-driven approach.

The new touch screen based Spiro® Control System manifests an operation- and production friendly design coupled with many features, including the newly developed optional Spiro® Connect function for enhanced production efficiency.

»» The world’s best tubeformer revolutionized an entire industry.

As the inventor of the spiral duct technology Spiro® launched a new modular Tubeformer concept for HVAC application. The new design aims at custom-tailored configurations suitable for individual production demands and greater functionality flexibility for future expansions.




Assemble the machine according to your needs when it comes to output (speed configurations), strength (material thickness configurations), and range (dimension configurations).



Shown with optional Spiro® Speed Carrier

Registered Design: 2153601-0001/-0002

## TUBEFORMER CONFIGURATION OPTIONS

			
	<b>STANDARD</b> Standard speed with standard drive configuration	<b>PRO</b> High speed with enhanced drive configuration for increased output	<b>HEAVY GAUGE</b> Increased torque with heavy gauge package to maximize power
<b>Diameter</b>	80 – 1600 mm (3” – 64”)	80 – 1600 mm (3” – 64”)	80 – 1600 mm (3” – 64”)
<b>Strip Thickness</b> (The smaller Ø cannot be made with thick material)	Galvanized steel 0.4 – 1.3 mm (0.016”– 0.051”) Stainless steel 0.4 – 0.6 mm (0.016”– 0.024”) Aluminium 0.4 – 1.3 mm (0.016”– 0.051”)	Galvanized steel 0.4 – 1.3 mm (0.016”– 0.051”) Stainless steel 0.4 – 0.8 mm (0.016”– 0.031”) Aluminium 0.4 – 1.3 mm (0.016”– 0.051”)	Galvanized steel 0.4 – 1.7 mm (0.016”– 0.066”) Stainless steel 0.4 – 1.0 mm (0.016”– 0.039”) Aluminium 0.4 – 1.7 mm (0.016”– 0.066”)
<b>Performance Tested / Guaranteed</b> (Based on duct of 3 m length)	0.5 mm (0.020”) thickness – 100 mm (4”) diameter – 180 Ducts/hour 0.7 mm (0.028”) thickness – 500 mm (20”) diameter – 53 Ducts/hour 0.9 mm (0.035”) thickness – 1250 mm (50”) diameter – 23 Ducts/hour	0.5 mm (0.020”) thickness – 100 mm (4”) diameter – Up to 250 Ducts/hour with SSC 0.7 mm (0.028”) thickness – 500 mm (20”) diameter – Up to 85 Ducts/hour 0.9 mm (0.035”) thickness – 1250 mm (50”) diameter – Up to 40 Ducts/hour	0.5 mm (0.020”) thickness – 100 mm (4”) diameter – 180 Ducts/hour 0.7 mm (0.028”) thickness – 500 mm (20”) diameter – 53 Ducts/hour 0.9 mm (0.035”) thickness – 1250 mm (50”) diameter – 23 Ducts/hour
<b>Features</b>	Automatic length measurement system Large state-of-the-art Touch Screen panel with superior user interface Cutting System: Smooth and noiseless cut with hydraulic Slitter Model H Spiro® Connect Function prepared	Automatic length measurement system Large state-of-the-art Touch Screen panel with superior user interface Cutting System: Smooth and noiseless cut with hydraulic Slitter Model H Spiro® Connect Function included Automatic angle adjustment function included	Automatic length measurement system Large state-of-the-art Touch Screen panel with superior user interface Cutting System: Smooth and noiseless cut with hydraulic Slitter Model H Spiro® Connect Function included Automatic angle adjustment function included
<b>Other Applications</b>	Post-Tensioning	Post-Tensioning	Post-Tensioning

# UNIQUE FEATURES

## Configurable to your own needs



**Spiro® Speed Carrier (SSC)**  
Increases production capacity up to 30%



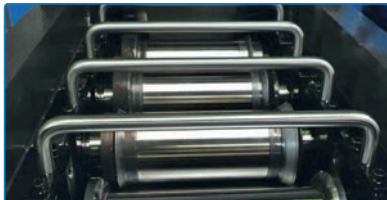
**Standard Run-off Table**  
duct length up to 3m, including automatic discharge



**Horizontal Decoiler DCH-3000**  
3 coil capacity at once



**FLEX Control**  
Ergonomic and easy access to all positions around the machine



**Cassette System**  
Fast set-up and ergonomic



**Form Roll Unit (FRU)**  
Standard unit with highest steel quality rollers



**Slitter Model H**  
Superior cutting / minimized maintenance / easy set-up



**Quick-lock System**  
Optional fast change of forming heads



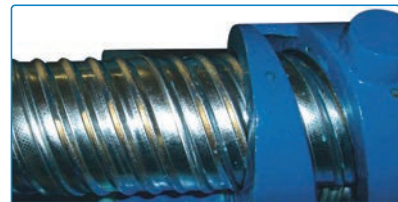
**State-of-the-art User Interface**  
User-friendly display featuring interface to network and internet, diagnosis tool and multilingual function



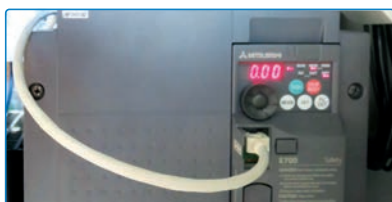
**Automatic Corrugation Unit**  
Produce ducts with smooth inside surface at the ends but reinforced with corrugation



**Standard Corrugation Unit**  
Reinforce your ducts with dimensions >250mm



**Post-tensioning Application**  
Special duct application for construction industry



**Drive Configuration**  
Different configurations to empower the production capacities

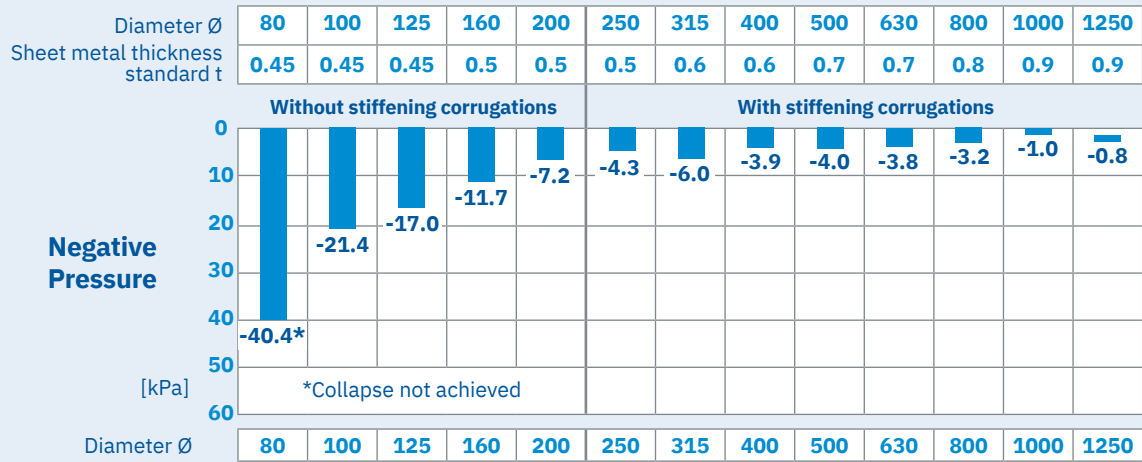


**Individual Engraving / Fixed Lockseam**  
For marketing purposes / For assured duct quality



**Spiro® Connect**  
Digitalize your production planning

### Collapsing pressure for duct SR



## TUBEFORMER 2020

The Spiro® Tubeformer 2020 model is the strongest and most powerful spiral duct machine in the industry.

The unique design was created to match the demand of special HVAC projects but also to address the needs of unique spiral duct applications used in other fields, predominantly in the industrial construction sector and mining industry.



### Unique Features:

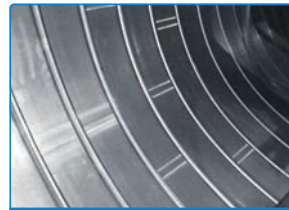
- Covers the complete range of international standard sizes up to 2500 mm diameter
- Unique thick material capacity with up to 2 mm for galvanized steel
- Reinforced mechanical transmission for heavy duty application



Tubeformer Plasmacutter



Thick Material



Optional: Inward lockseam



Extended duct length

### TUBEFORMER 2020 CONFIGURATIONS OPTIONS

	STANDARD	HIGH SPEED
<b>Diameter</b>	80 – 2500mm (3" – 100")	80 – 1800mm (3" – 70")
<b>Strip Thickness</b>	0.4 – 2.0 mm (0.016" – 0.079") galvanized steel 0.4 – 1.3 mm (0.016" – 0.051") stainless steel 0.4 – 2.0 mm (0.016" – 0.079") aluminum	0.4 – 1.3 mm (0.016" – 0.051") galvanized steel 0.4 – 0.8 mm (0.016" – 0.031") stainless steel 0.4 – 1.3 mm (0.016" – 0.051") aluminum
<b>Cutting System</b>	High Performance Slitter Model H and/or Plasmacutter	High Performance Slitter Model H
<b>Other Applications</b>	Voidforming / Mining ventilation / Jacketing	Voidforming / Jacketing
<b>Performance Tested / Guaranteed</b>	0.5 mm (0.022") thickness – Ø100 mm (4") – 180 Ducts/hour 0.7 mm (0.028") thickness – Ø500 mm (20") – 53 Ducts/hour 0.9 mm (0.035") thickness – Ø1250 mm (50") – 23 Ducts/hour 1.25 mm (0.049") thickness – Ø1600 mm (64") – 19 Ducts/hour 2.0 mm (0.079") thickness – Ø2000 mm (80") – 15 Ducts/hour	0.5 mm (0.022") thickness – Ø100 mm (4") – 275 Ducts/hour 0.7 mm (0.028") thickness – Ø500 mm (20") – 93 Ducts/hour 0.9 mm (0.035") thickness – Ø1250 mm (50") – 40 Ducts/hour 1.25 mm (0.049") thickness – Ø1600 mm (64") – 19 Ducts/hour

## DECOILER DCH-3000

The DCH-3000 decoiler is a horizontal decoiler for up to 3 coils.

The design allows a quick change over time and serves to cope with thick material. This unique decoiler performs perfectly in line with the Tubeformer at maximum speed on any duct size.

TECHNICAL DATA	
Max. Coil Weight	Max. 3 Coils – 1000 kg each
Max Speed	100 m / min.
Coil Dimensions	Inside diameter min. 508 mm (20")
Outside Diameter	Max. 1400 mm (55")
Strip Thickness	0.4 – 1.6 mm (0.016" – 0.063")
Strip Width	Max. 150 mm (6")
Weight	750 Kg



## SPIRO® SPEED CARRIER (SSC)

The Spiro® Speed Carrier increases production capacity and automatizes your process significantly.

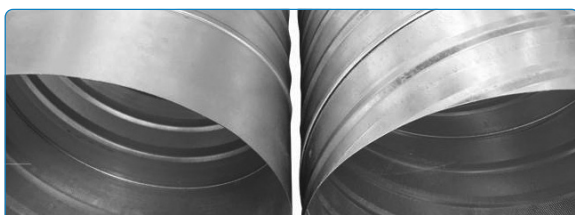
The combination of the duct Speed Carrier with the Slitter Model H results in an up to 30% higher performance rate. The duct Speed Carrier handles the full ranges of dimensions – Ø 80 – 2000 mm and can be retrofitted on most Spiro® Tubeformers.



### Unique Features:

- Possible to retrofit most Spiro® Tubeformers
- Increases production capacity
- Ensures careful duct handling / No Buckles
- Automates your process
- Available in 3 meters
- Multiple carrier solution available

## AUTOMATIC CORRUGATION UNIT



Left: PLC corrugation / Right: Standard

### Spiro®'s uniquely featured "Controlled corrugation unit"

Enables you to produce ducts with a smooth inside surface at the ends but still reinforced with the corrugation.

The result is a duct with considerable less amount of leakage and maintained rigidity.



## U-BRACKET

**The smart way to save time, material and money.**

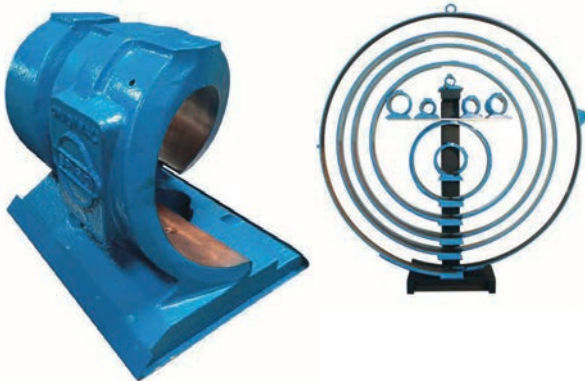
Equip your critical corrugated forming head sizes with a Spiro® U-bracket to prevent an arduous change-over procedure.

More importantly, you no longer need to invest your time in repositioning the corrugation and as a result you save substantially on material cost.



## FORMING HEADS

**Original Spiro® forming heads are made out of high quality aluminium and vitally contribute to consistently produce premium ducts.**

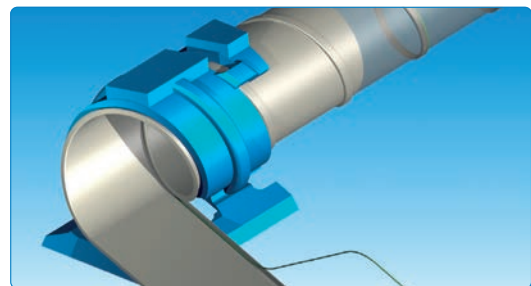


TECHNICAL DATA		
DIN Ø / SMACNA	Inside Diameter (mm)	Outside Diameter (inch)
Diameter	80 / 90 / 100 / 125 / 160 / 180 / 200	3 / 4 / 5 / 6 / 7 / 8
Diameter	224 / 250 / 280 / 300 / 315 / 355 / 400	9 / 10 / 11 / 12 / 14 / 16
Diameter	450 / 500 / 560 / 600	18 / 20 / 22 / 24
Diameter	630 / 710 / 800	26 / 28 / 30 / 32
Diameter	900 / 1000 / 1120 / 1250	34 – 50
Diameter	1400 / 1500 / 1600	56 – 62
Diameter	1800 / 1900 / 2000	70 – 78
Diameter	2100 / 2300 / 2500	82 – 100

## SEAM SEAL SOLUTION

**Seam Seal Duct Solution on your Spiro® Tubeformer.**

Equip your Spiro® Tubeformer with a seam seal duct solution. This optional tool serves to provide your customers with a duct solution that is very effective at stopping leakage of vegetable oils and greases, as well as most petroleum products including white spirit.





# ADVANTAGES OF SPIRAL DUCTWORK

**Lower Heating / Cooling Energy Use**

**Lower Fan Energy Use**

**Lower Air Leakage**

Note!  
The same tightness class for both systems.

**Less Material Cost / Shorter Installation Time**

## OTHER APPLICATIONS

### Mining Ventilation

For the fast and reliable production of heavy duty manufactured steel ducts.



- Possible to retrofit most Spiro® Tubeformers
- Up to 12 meters in length
- Fully automated production
- Low maintenance costs
- Ducts can be manufactured on-site
- Duct diameter from 80 – 2500 mm
- Material thickness up to 2.0 mm
- Meets all mining standards

### Jacketing

Jacketed piping features a core pipe which is completely surrounded by a jacket pipe.

- Pre-insulated pipes are commonly used for water piping systems and different types of energy applications (district energy)
- Insulation is usually carried out with polyurethane foam and the outer casing material is galvanized or stainless steel which will withstand extreme climatic conditions



### Voidforming

Tubes for concrete structures. Spiro® Voidforming tubes meet the requirements of concrete structures for a highly rigid but light sheet-metal tube that can withstand being embedded without deformation



- Voidformers withstand reinforcement loads and transportation as well as fast casting
- Voidformers are sealed with end cones that are supplied fitted to the tubes

### Post-Tensioning

Post-Tensioning is another Tubeformer application used in the building industry, mainly for bridges, high rise buildings, and power plant buildings.

- Duct production with galvanized steel between 0.4 mm – 0.6 mm thickness
- Duct diameter from 40 – 160 mm
- Up to 12 meters in length
- Saving raw material because of usage of strip width 78 mm

**CUTTING**





**CURVECUTTER  
PLASMACUTTER**




**ROUNDING**






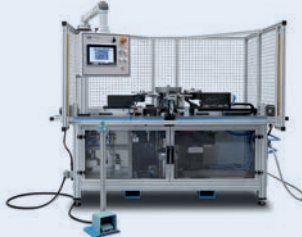

**ROLLFORMER**

**WELDING**

**SPOTWELDER  
STITCHWELDER**

**SEALING**

**SPIRO® SHAPER  
FITTINGSHAPER**

**FLANGING &  
CLOSING**





**AEM 400 PRO  
GORELOCKER**

## SPIRO® PLASMACUTTERS

**Spiro® has been renowned for advanced plasma cutting systems since 1992.**

The sound reputation stems from continuous development and redesign efforts to maintain the leading edge technology, including the self-developed Spiro® Control System, high-quality mechanical components

combined with Hypertherm as the leading powermax unit, as well as the compatibility with the HVAC Cam-Duct software.

TECHNICAL DATA		
PLASMACUTTER	FLORETT	CUTLASS
Work Area	1500 x 3000 mm (5' x 10')	1500 x 6000 mm (5' x 20')
Output	300 segments/hour – size 315 mm/90°	240 segments/hour – size 315 mm/90°
Traverse Speed	40 m/min. (131 fpm) both X- and Y-axis	>22 m/min (>72 fpm)
Power Supply	4 kVA / 380 – 480 V / 50 or 60 Hz / 3-phases	4 kVA / 380 – 480 V / 50 or 60 Hz / 3-phases

## PLASMACUTTER FLORETT

### Unique Features:

- Spiro® HS Controller v.3
- 50% faster traverse speed
- Total production time reduced up to 20%
- Enforced high precision linear unit for the torch
- Belt driven technology



## PLASMACUTTER CUTLASS

### Unique Features:

- Spiro® HS Controller v.3
- Enforced high precision linear unit for the torch
- Step forward/backward function
- Free mode, select any part or contour
- Optimized sheet utilization
- Remote Internet access for technical support

## SPIRO® HS CONTROLLER V.3



### Unique Features:

- Step forward/backward function
- Free mode, select any part or contour
- Optimized sheet utilization
- Remote Internet access for technical support

## PLASMACUTTER CARTRIDGE FILTERING UNIT

Equip your Plasmacutter with a filtering unit to achieve a clean environment in your workshop and to ensure that the dust emissions are always guaranteed  $< 2 \text{ mg/m}^3$ .

The perfectly filtered air could be ejected in the working area (in accordance with the local regulations) or directed into an exhaust chimney.

The filtering unit prevents dust and metal particles to be exposed to the surrounding environment and thus contributes to an ecological responsible working approach while ensuring employee-friendly working conditions.

### Unique Features:

- Ensures Smoke-Free Environment
- Produces Clean Air for Employees
- Energy Saving Friendly



## PLASMAFEEDER

### Equip your workshop with a Spiro® Plasma Feeder.

Use the Plasma Feeder to increase your productivity and save material. Supply your Plasmacutter directly from a coil line (2 or 4 decoilers), including sheet selector.

#### Unique Features:

- Increase your Productivity
- Save Material
- Comes with 2 or 4 Decoilers
- Includes Sheet Selector



## CURVECUTTER DELTA 1500

This machine is specially designed for cutting out segments of highest accuracy from a blank (i.e. bends, flat oval bends and domes).

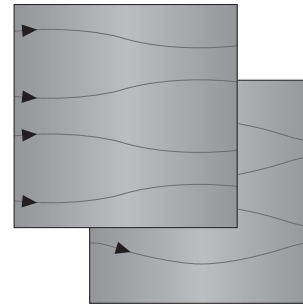
The Curvecutter Delta 1500 is a suitable machine for a high production line together with the Spiro® Roll-former, Stitchwelder and Gorelocker.



#### Unique Features:

- Select from a wide range of programs ranging from 100 to 1500 mm diameter
- Simple input for circular or flat-oval bends, angle cuts and other customized items
- Accurate cutting of segments with high repeatability due to high-tech servo motors
- No burrs and no hardening of the edge as a result of cutting with 4 roller-shears
- Efficiency: 1 elbow 200 mm with 4 segments is cutting in 1 path within 15 seconds
- Output: 560 segments / hour – size 315 mm / 90°

TECHNICAL DATA	
Maximum Sheet Width	1500 mm (60")
Material Thickness	0.4 – 1.1 mm (0.016" – 0.043") galvanized steel 0.4 – 0.6 mm (0.016" – 0.024") stainless steel 0.5 – 1.1 mm (0.020" – 0.043") aluminium
Cutting Speed	2 – 10 m / min. (6 – 32 fpm)
Segment Angle	5 – 46° (in steps of 1/10 degree)
Elbow Diameter	100 – 1500 mm (in steps of 1 mm) (4" – 60")
Number of Cutters	1 – 4 (selectable on control panel)



## ROLLFORMER AR 800

The Rollformer AR 800 represents a new generation of Rollformers.

Built to support high-speed production of round-shaped metal parts and perfectly complements the Spiro® Stitchwelder and Litelocker family.

### Unique Features:

- Designed for fast and automatic rolling of bend segments, T-pieces, connectors etc.
- The Rollformer can be operated in combination with the Stitchwelder allocating only 1 operator for both machines
- Equipped with remote control
- Automatic feeding table



TECHNICAL DATA	
Diameter Range	100 – 1000 mm (4" – 40")
Maximum Width of Blank	800 mm (31") (depending on thickness & Ø)
Material Thickness	0.4 – 1.0 mm (0.016" – 0.039") galvanized steel 0.4 – 0.6 mm (0.016" – 0.024") stainless steel 0.4 – 1.0 mm (0.016" – 0.039") aluminium
Maximum Output	1200 segments / hour – size 315 mm / 90°
Power Supply	1.5 kVA / 400 V / 50 Hz (other voltage on request)



## STITCHWELDER PRO 2.0

The latest edition of our market leading welding solution, equipped with a brand new state of the art control system.

Improved control of the welding process, easy and fast setup, latest generation of mercury free welding rollers with extended lifetime that comply with the European Union Regulation (EC) No 1102/2008.

### TECHNICAL DATA

Welding Length	50 mm – 1000 mm (2" – 40")
Diameter Range	75 – 1000 mm (3" – 40")
Material Thickness	0.4 – 1.0 mm (0.016" – 0.039")
Overlap	6 mm (0.24") for 1000
Wire Diameter	2 mm (0.078")
Adjustable Welding Speed	2 – 15 m/min. (6.6 – 49.2 fpm)
Maximum Output	700 segments / hour – size 315 mm / 90°



The Stitchwelder PRO 2.0 is designed to give a perfect air-tight seam thru out the whole welding length. It has built its world class reputation upon well documented consistency and reliability.

### Unique Features:

- Highest welding speed in the industry
- Mercury free welding rollers
- Spiro® Control System, easy recipe management, load, save or backup with just a click
- Prepared for Spiro® Connect (PC connection)
- Automatic Pressure setting from the panel, no mechanical adjustments
- Unique two-step function for easy handling of long or large items
- Unique setting of both start and end current for optimized welding result
- Upgraded speed setting with optimized setting for continuous and length of each stitch



## SPIRO® MERCURY FREE SOLUTION

Upgrade your Spiro® Stitchwelder with a mercury free cooling solution kit to fulfill the European Union "REGULATION (EC) No 1102/2008".





## GORELOCKER COMBI-T

High production Gorelocker produce standing lockseam elbows and reducers.

The high flexibility is achieved by means of 2 separate workstations: a flanging station and seam closing station. Thus the machine is always ready for operation

without time-consuming conversion. The standing seam reduces welding to just one longitudinal seam and improves rigidity.



### Unique Features:

- Dual working station
- Maximum flexibility with no equipment change
- Constant quality / High production speed
- High capacity with material thickness up to 1.5 mm
- Virtually no maintenance, no lubrication necessary
- High quality parts and all rotating tools are made of hardened steel / High quality seams

### TECHNICAL DATA

Diameter Range	125 – 1250 mm (5" – 50")
Material Thickness	0.4 – 1.5 mm (0.016" – 0.059") galvanized steel 0.4 – 1.0 mm (0.016" – 0.039") stainless steel 0.4 – 1.5 mm (0.016" – 0.059") aluminium
Flanging Speed	Max. 120 m / min. (394 fpm)
Maximum Output	40 bends / hour (4 segments – Ø 200 mm bend)
Electrical Connection	3 x 400 V / 50 Hz / 4 kVA (other connections on request)



## FITTINGSHAPER 1250

The Fittingshaper contributes vitally to reduce the leakage rate in the ventilation system, resulting in reduced energy consumption costs.

The Fittingshaper is a flexible machine made for mounting rubber gaskets to fittings in small volumes but with many different sizes.

TECHNICAL DATA	
Diameter Range	125 – 1250 mm (5" – 50")
Material Thickness	0.5 – 0.9 mm (0.020" – 0.035") galvanized steel
	0.5 – 0.8 mm (0.020" – 0.031") stainless steel
Hydraulic System	All drives & movements
Power Supply	5 kVA / 400 V / 50 Hz (other voltage on request)
Maximum Output	2-gaskets (Ø 300 mm) in less than 2 minutes

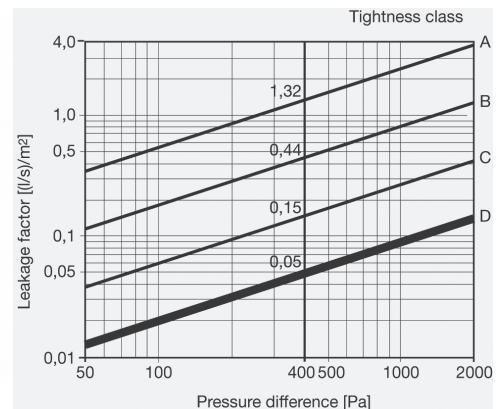
➤ Combine the Fittingshaper 1250 & Spiro® Shaper to achieve the full dimension range of rubber gasket on your fittings.

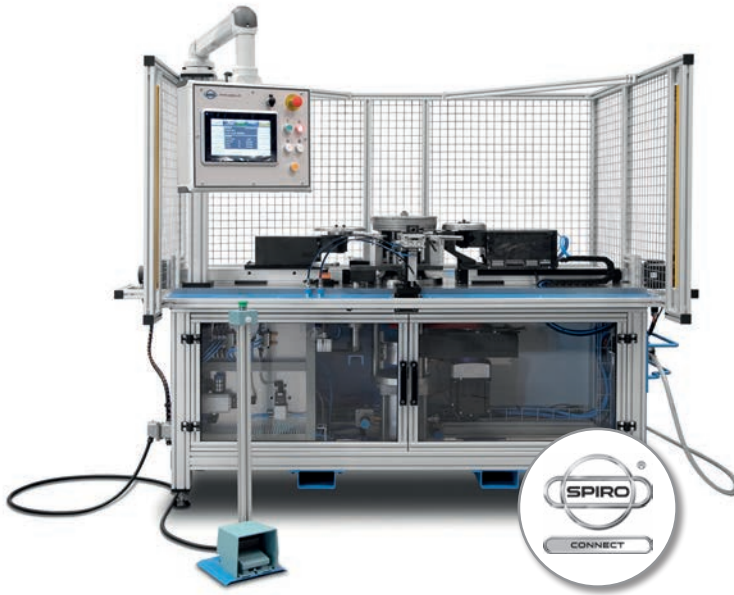


Patent No.: US 6,598,285 B1  
Patent No.: US 6,170,883 B1

### Unique Features:

- Fast and easy installation
- Factory fitted gasket without any loose parts
- Temperature resistant from -30 °C to +100 °C
- Withstands positive pressure – 3000Pa





## SPIRO® SHAPER

The Spiro® Shaper stands out with the efficiency to mount gaskets in a fast and accurate fashion on fittings.

The focus on smaller diameter range (100 – 500 mm) results in a high output volume combined with consistency due to the precise machine set-up.

Moreover, the Spiro® Shaper can produce a rolled edge on non-gasket products. In addition, the machine handles any type of fittings (e.g. saddle, bends, T-pieces). Also, to optimize the leakage tightness, Spiro® implemented 5 different widths of rubber gaskets, covering the entire dimension range.

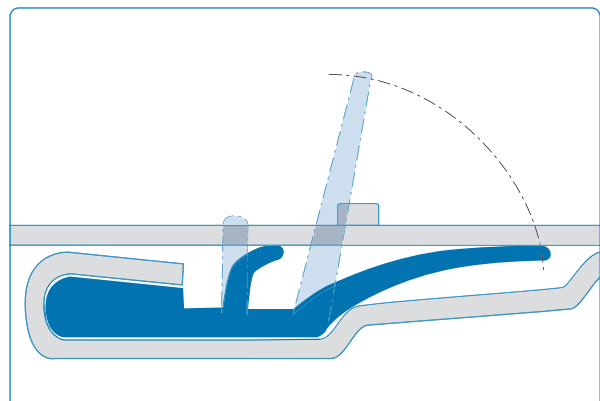
### TECHNICAL DATA

Diameter Range	80 – 500 mm (3" – 20") (Ø 630 mm on request)
Material Thickness	0.5 – 0.9 mm (0.020"– 0.035") galvanized steel 0.5 – 0.8 mm (0.020"– 0.031") stainless steel
Power Supply	400 V / 50 Hz / 3 Phases (other voltage on request)
Pneumatic Connection	7 bar, 200 l / min. (as required minimum)
Maximum Output	4 – 6 pcs / min. of 2-gasket fittings (Ø 160 mm)

» The full range of reducers, couplings and bends can be equipped with the self sealed system.



Spiro® double lip gasket



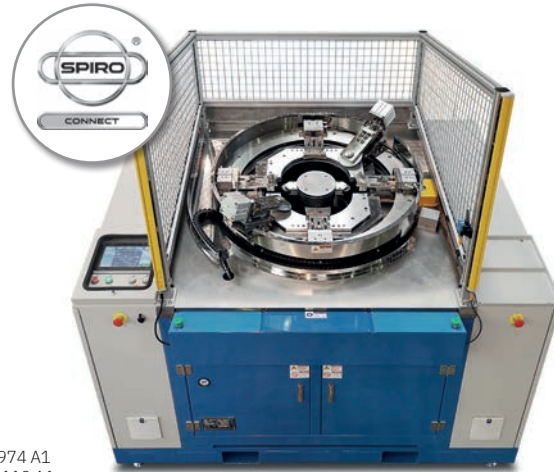
Double lip gasket ensures tightness class D



# AEM 400 PRO

**The Automatic Elbow Machine PRO offers the fastest and most efficient way of producing Gored elbows.**

From welded to finished high-quality and tight bend in one single operation. Totally automatic process without any intervention from the operator, safe and easy.



Patent No.: WO 2016/047974 A1  
Patent No.: US 2017/0320119 A1

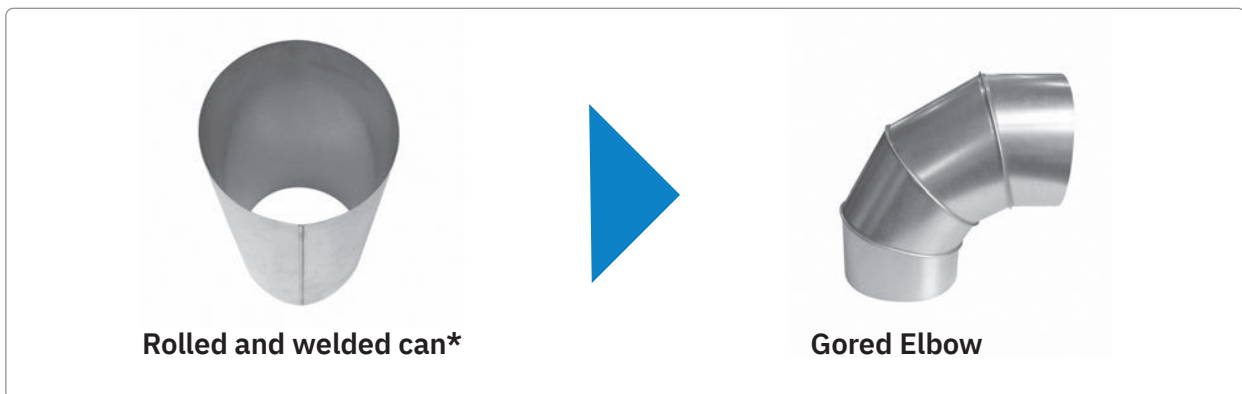
**Unique Features:**

- Choose 4 or 5 segment edition (22.5° or 30° angle)
- State-of-the-art Touch screen HMI
- 100% automatic working process, no hands on operation
- Constant quality process and 0 scrap
- Makes a rigid and fix high quality lock seamed bend
- Works perfectly with pre-assembled gaskets, for type D production

TECHNICAL DATA TYPE A	
Segments	4pcs for 90° elbow (segment angle 30°)
Elbow angles	30° / 60° / 90°
Diameter Range: Recommended configurations, max Ø range per machine is 80mm	A1: Ø 100 – 125 – 160 mm A2: Ø 150 – 180 – 200 mm A3: Ø 250 – 300 – 315 mm A4: Ø 355 – 400 mm
Material Thickness	0.5 – 0.7 mm galvanized steel

TECHNICAL DATA TYPE B	
Segments	5pcs for 90° elbow (segment angle 22.5°)
Elbow angles	45° / 90°
Diameter Range: Recommended configurations, max Ø range per machine is 80 mm	B1: Ø 100 – 125 – 160 mm B2: Ø 150 – 180 – 200 mm B3: Ø 250 – 300 – 315 mm B4: Ø 355 – 400 mm
Material Thickness	0.5 – 0.7 mm galvanized steel

**Time to increase your productivity and to save cost? Contact us today to find out more.**



\* automatic rounding and welding equipment is also provided by Spiro®

## LITELOCKER

The Spiro® LiteLocker is a sturdy and advanced button lock machine.

It enables up to 3 plates of sheet metal to be firmly joined together (cold forming) without incurring any damages to the sheet metal surface. The press force is made by using a pneumo-hydraulic system. The result is a high quality joint solution that eliminates the need for screws & rivets and requires no coating treatment due to no corrosion.

### Unique Features:

- No heating of material
- No need to make holes for rivets
- Low energy consumption and minimal maintenance
- No damage to galvanized or prepainted surfaces
- Usable for all kind of connections (rectangular and round)
- Low maintenance costs and noise level



TECHNICAL DATA	
Length of Arm	400 mm (15")
Minimum Tube Diameter	100 mm (4")
Maximum Material Thickness	Galvanized steel 2 x 1.5 mm (2 x 0.059")
	3 x 1.0 mm (3 x 0.039")
	Stainless steel 2 x 0.8 mm (2 x 0.031")
Capacity	60 stroke / min.
Pre Stroke	52 mm (2")
Press Stroke	8 mm (0.31")
Total Stroke	60 mm (2.4")
Air Supply	6 bar



Various types of dies and punches



## SPOTWELDER

Spotwelder for welding of fittings, where the Stitchwelder cannot be used.

TECHNICAL DATA	
Welding Power	Max. 55 kVA
Diameter Range	75 – 1000 mm (3" – 40")
Air Pressure	6 Bar
Stroke of Electride	10 – 60 mm (0.39" – 2.36")
Depth of Arm	380 – 700 mm (14.96" – 27.55")
Maximum Output	200 segments/hour – size 315 mm/90°

## ROLLFORMER RME

Rollformer to make roundshaped metal parts.

TECHNICAL DATA	
Material Thickness	Max. 1.2 mm (0.047")
Roller Length	1280 mm (50")
Working Diameter	100 – 1000 mm (4" – 40")
Roll Diameters	60 mm (2.36")
Working Mode	Dual-Speed
Maximum Output	400 segments/hour – size 315 mm/90°



## EDGEFORMER SME 63

The Edgeformer has an arm length of 250 mm and includes 7 sets of rolls with different available profiles, underlining the high-quality machine parts.



TECHNICAL DATA	
Material Thickness	Max. 1.7 mm (0.067") mild steel
Arm Length	250 mm (10")
Diameter	63 mm (2.48") (Rolls)
Working Speeds	6 m/min. (20 fpm) or 12 m/min. (39 fpm)



## OVALIZER 36 / 10

The Ovalizer transforms smooth and corrugated round spiral ducts into flat-oval ducts.

Machine control is by PLC and the Ovalizer is equipped with superior hydraulic unit to ensure the required force.

TECHNICAL DATA	
Size	150 x 435 mm – 915 x 2650 mm (6" x 7" – 36" x 106")
Tube Length	3000 mm (10')



## ROVAL ROLLER 48 / 20

Roval-Roller shapes round and flat-oval segments and reducers as well as many other forms common to the sheet-metal industry.

With its programmable controller, it is designed to duplicate shapes at the high level of accuracy critical for mating parts.

TECHNICAL DATA	
Material Width	Max. 1220 mm (48")
Material Thickness	Max. 1.0 mm (0.039")

### Advantages Of Oval Ductwork:

- Better Airflow
- Easier to Install
- Less Joints
- Less Hangers
- Often Requires Less Space
- Corrugation For Added Strength
- Modern Design



Oval Ducts



Oval Fittings

## SPIRO® DUCTLINE

This powerful Ductline offers the highest output with a minimum of floor space required.

As standard it's delivered with the Spiro® state-of-the-art control system. This high performing Ductline has a fully hydraulic drive system which offers maximum force, strength and endurance.

### Unique Features:

- Touch screen controller with genuine Spiro® user interface
- Programs for L-sections, U-ducts, fully wrapped ducts or plain sheet
- Z-Profile (Trapez-Profile and bead as option)
- Fully hydraulic feeding, shear and folding unit
- Stand-alone encoder for higher accuracy
- Smallest footprint in the industry

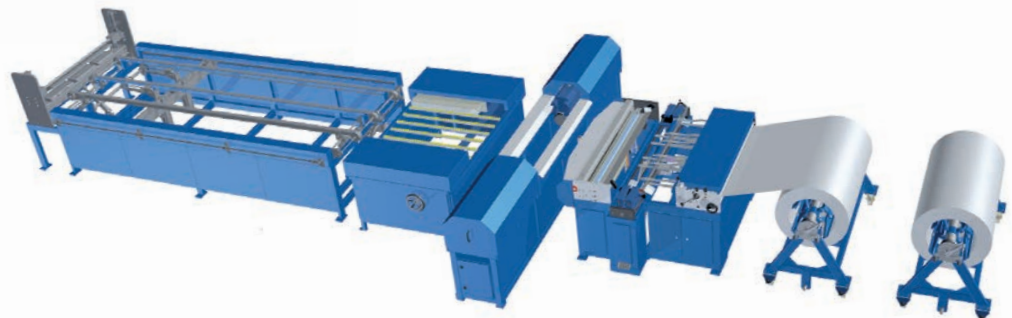


» Unique modular approach to boost your Spiro® Ductline into a fully automatic rectangular duct forming line with integrated flanges – expand gradually or at once, you decide.

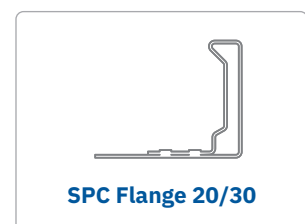
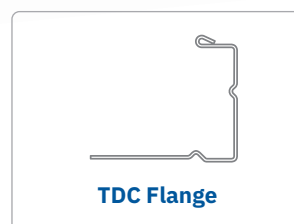
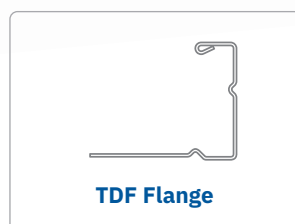


### TECHNICAL DATA

Processable Sheet Thickness	0.5 – 1.25 mm (0.020" – 0.049") on request up to 1.5 mm (0.059")
Max. Coil Width	1500 mm (60")
Max. Coil Weight	Standard 5 tons
Duct Dimension for Box Sections	Min. 125 x 125 mm (4.9" – 4.9") / Optional: 100 x 100 mm (4" x 4")
Capacit	Up to 5 – 10 tons / day



### INTEGRATED FLANGE OPTIONS





# UNIQUE MODULAR SYSTEM

Configurable to your own needs



Up to 6 decoilers (5 or 7 tons)



Sheet Selector Unit



Automatic Hydraulic Notching Unit



Standard Roller Shear Slitting Unit



Automatic Roller Shear Slitting Unit



Automatic Slitting Unit & Punching System Combined



Automatic Punching System for Tie Rod



Crosscut Pittsburgh Unit



Rollforming Unit for Selected Integrated Flange System



Automatic Folding (& Closing) Unit



Heavy Duty Shear for >1.5 mm



Spiro® Control System

➤ Unique Modular Solution Compact or Fully Integrated – You Decide. Future Module Integration Always Possible Latest Spiro® Technology.

## 20 & 30 ROLLFORMING MACHINE

This 19 station Rollforming Machine creates a rigid SPC flange from hand fed blanks using material from the duct wall.

TECHNICAL DATA		
Rollforming Machine	20	30
Sheet Thickness (Flanges)	0.5 – 0.9 mm galvanized steel	0.8 – 1.2 mm galvanized steel
Min. Blank Length	230 mm	230 mm
Max. Working Speed	18 m/min	18 m/min



### Unique Features:

- Dual tooling included
- Main drive with triple heavy duty chains
- Double stitching stations with off-set
- Quick release trolley system for extra short pieces
- Exit straightening roll to correct any vertical bow

## TDC / F ROLLFORMING MACHINE



This 14 station Rollforming Machine makes a rigid TDC or TDF flange from hand fed blanks using material from the duct wall.

The machine is dual sided and produce clips on the second side.

TECHNICAL DATA	
Processable Sheet Thickness	0.5 – 1.2 mm
Max. Working Speed	8 m/min
Tooling	2 set of rollers included, TDC or TDF + clips

## PROFILING MACHINE TPM 2500

Machine for making reinforcement beads evenly spread throughout the whole width of the blank.

Choose one out of three possible types of reinforcement patterns (i.e. Z, Trapez, or Bead).

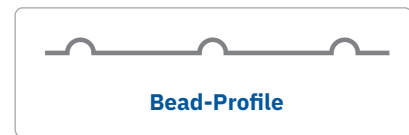
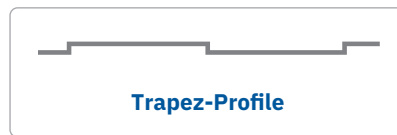
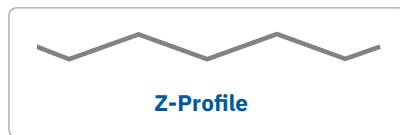


### Unique Features:

- Easy adjustable side guide
- Enforced overhead beam
- Hardened rollers for long lifetime

### TECHNICAL DATA

Max. Sheet Width	2500 mm
Processable Sheet Thickness	0.4 – 1.2 mm, galvanized steel
Max. Working Speed	15 m/min



## LOCKFORMING MACHINE 16'S GAUGE

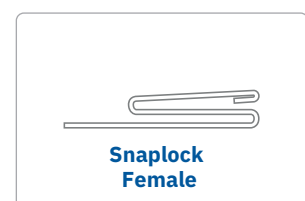
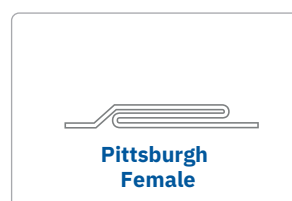
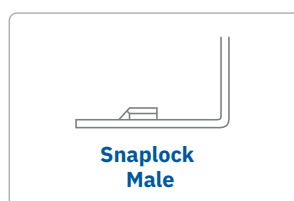
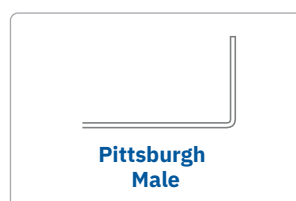
This powerful Pittsburgh machine comes with 16's Pittsburgh rolls male and female as standard.

### Unique Features:

- Automatic gauge compensation to ensure tight definition of the seam throughout the complete range of 0.7 – 1.6 mm (0.028" – 0.063")

### TECHNICAL DATA

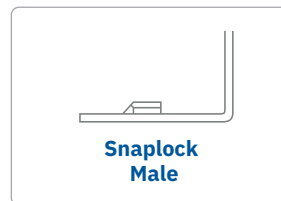
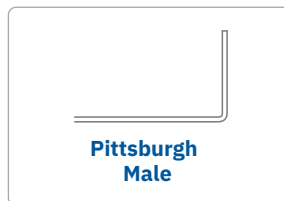
Material Thickness	0.7 – 1.6 mm (0.028" – 0.063") galvanized steel
Pittsburgh pocket size	12.5 mm (0.49")





## FLANGING MACHINE 16'S GAUGE

This 16's gauge Flanging Machine easily turns up 90° flanges on radius and straight parts and is equipped to make a straight angle flange for Pittsburgh as standard.



### Unique Features:

- Makes a consistent height flange
- Lock back function for easy removal of work piece
- Easy to operate with spring loaded follower roll and height pin

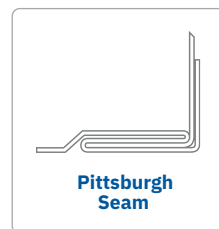
### TECHNICAL DATA

Diameter Range	Up to 15 mm (0.59") high angled flange
Material Thickness	0.7 – 1.6 mm (0.028" – 0.063") galvanized steel

## FOLDMASTER

The semi-automatic Foldmaster Seam Closing Machine TS C 2000 makes it fast and easy to close an already prepared Pittsburgh seam on rectangular ducts and fittings.

Airtight and noise free.



### Unique Features:

- Closes Pittsburgh lock on bends and straight ducts at a speed of up to 15 m/min
- Easy to work – easy service
- Noise-free operation
- Airtight lock

### TECHNICAL DATA

Working Length	2000 mm
Max. Thickness	1.25 mm
Min. Duct Square	150 x 150 mm
Min. Radius on 90° Bends	300 mm
Max. Working Speed	15 m/min

\* All sizes of Pittsburgh locks can be operated on request

## SMART-CLOSER

The fast and easy way to produce the highest quality duct work.

NEW – Upgrade your Smart-Closer with an automatic mastic kit solution to create a tight seam for your rectangular duct system.



### TECHNICAL DATA

Material Thickness	0.5 – 1.0 mm (0.020” – 0.039”) galvanized steel
Speed	Max. 15 m/min. (49 fpm)

### Unique Features:

- For seaming rectangular and square ducts
- Full length duct support
- Operation start by foot pedal
- No need for lock-forming or flanging





## SPIRO® CARE CONTRACT

The Spiro® Care Contract guarantees an annual inspection on your Spiro® machines, as well as a recommendation on how to optimize your investment through a service, repair, and/or upgrade with original Spiro® parts.

In addition, your operators can profit from tips and feedbacks with respect to the best usage and maintenance of your Spiro® machinery to prevent breakdowns and continuously achieve a high output quality.



- » Special discount on spare parts and work
- Warranty on spare parts
- Priority service on breakdown
- Condition report on your machine
- Remote technical support free of charge



### 1. Spiro® Care Contract Exclusives

- 30 day net payment conditions after paid contract, up to CHF 5'000
- Prioritised support/ shipment of parts when breakdown
- Remote technical support, free of charge
- Certificate certified Spiro® producer
- Cost for the Spiro® emergency T-Box (rental version) included when needed
- When order spare parts according engineers inspection quote, latest 30 days after inspection, with a minimum of CHF 5'000, labour cost included

### 2. Special discount

- The Customer is entitled to a discount of 15% on spare part orders and work

### 3. Inspection visit

- The Customer is entitled to one inspection at one facility every 12 months by a Spiro® Engineer on the machine(s) bought from Spiro® (Spiro® make the schedule and plan the inspection)
- The purpose is to inspect the condition of the Customer's machine(s) and give advice of required maintenance
- This inspection is estimated to take between 2 to 8 hours, depending on the amount of machines at the Customers facility
- The Customer will receive a protocol in writing following the inspection

### 4. Warranty on spare parts

- When a spare part is exchanged by a Spiro® Engineer on the machine, Spiro® then provides a 6 month warranty at that spare part

## SPARE PARTS PACKAGES

Convenient spare parts packages guaranteeing that your Spiro® Tubeformers are equipped with original Spiro® spare parts and ensuring a continuous smooth production.

### SILVER PACKAGE (25% DISCOUNT)

PACKAGE CONTENTS Tubeformers; X-20 & SMART	
Item	Qty
Rubber wiper	6 m
Folding finger	5
Flange roller standard complete (flange rollers, protection seals, adjusters, bearings)	2
Support roller	2
Clinching rollers 0.4 – 0.6 mm & 0.7 – 1.0 mm	1 of each
Cutting knife standard upper & lower	1 of each

PACKAGE CONTENTS Tubeformers; 2002, JRX, 1602, PRO & 2020	
Item	Qty
Rubber wiper	6 m
Folding finger	5
Flange roller standard complete (flange rollers, protection seals, adjusters, bearings)	2
Support roller	2
Clinching rollers 0.4 – 0.6 mm & 0.7 – 1.0 mm	1 of each
Cutting knife standard	2



### TUBEFORMER PACKAGES

PACKAGE CONTENTS Formroller Unit No.1A / 1N	
Item	Qty
Formroller set no. 1 (Complete)	1
Roller axle 0.5 – 137 mm	6
Upper Guide Roller (Complete)	1
Shaft guide roller	1
Ball bearing	16
Countersunk unbraco screw M6	16
Collar mb6 (1N)	12
Spring retaining ring D-30x1.50 (1A)	12
Axle nut km6 (1N)	12

PACKAGE CONTENTS Formroller Unit No. 3	
Item	Qty
Formroller set no. 3	1
Roller axle 0.9 – 137 mm	6
Upper Guide Roller (Complete)	1
Shaft guide roller	1
Ball bearing	16
Countersunk unbraco screw m6	16
Spring retaining ring D-30x1.50	12

PACKAGE CONTENTS Formroller Unit No. 4	
Item	Qty
Formroller set no. 4	1
Roller axle 1.2 – 140 mm	6
Upper guide roller 140 mm (complete)	1
Shaft guide roller	1
Ball bearing	16
Countersunk unbraco screw m6	16
Spring retaining ring D-30x1.50	12

## DRIVE ROLLER (FULL TUBEFORMER 1602) PACKAGE

PACKAGE CONTENTS Drive Roller Package	
Item	Qty
Drive roller upper std	1
Lower drive roller std	1
Axle upper drive roller (complete)	1
Axle lower (complete)	1
Axle encoder upper drive roller	1
Flexi coupling 6 / 8 mm	1
Bearings	6
O-rings	4
Loctite 10ml	1
Bearing housing upper	1
Bearing housing outside	1
Bearing cover outside without encoder	1
Bearing cover motor side	1
Bearing housing motor side	1
Cylinder head screw	1
Countersunk screw	1
Adjusting screw	3
Countersunk screw	1

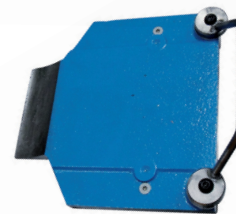


## GUIDEPLATE PACKAGES

### PACKAGE CONTENTS

Guideplate Lower / Guideplate Upper

Item	Qty
Guideplate Lower	-
Lower front guide plate	1
Lower rear guide plate	1
Guideplate Upper	-
Upper front guide plate	1
Upper rear guide plate	1

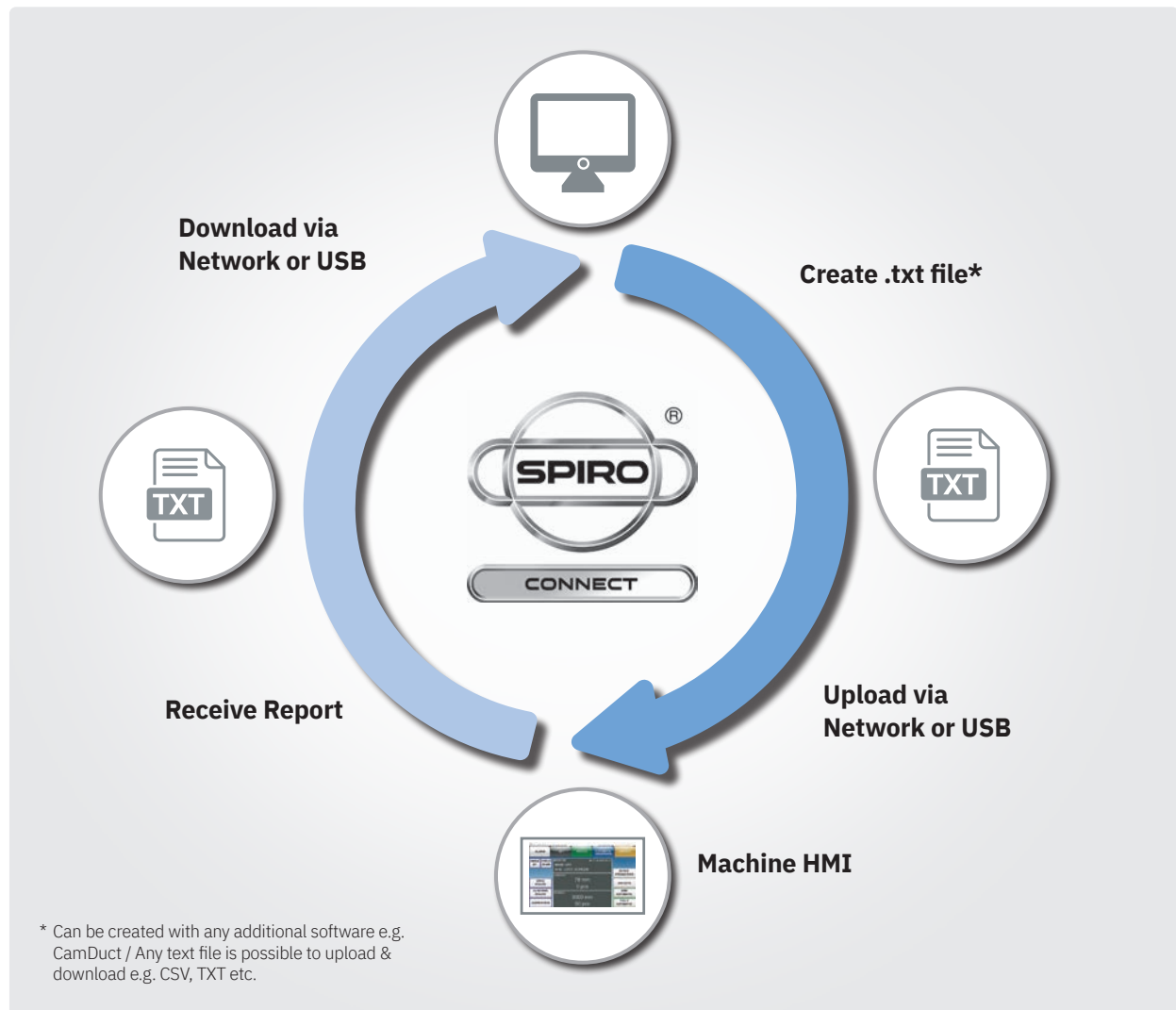




## SPIRO® CONNECT

Spiro® is innovative and evolves over time – we offer the optimal digital add-on option. Connect your computer with the latest generations of our Ductline and Tubeformer 1602 / 2020 machines.

More Spiro® machines (Shaper, Curvecutter Delta 1500, Stitchwelder Pro 2.0, AEM 400 PRO) available on request.



### SPIRO® ACCESS



- Direct online Remote helpdesk\*
- Fast support anywhere on the world

\* All machines with the Spiro® Control System / Any VNC Viewer can be used

### SPIRO® T BOX



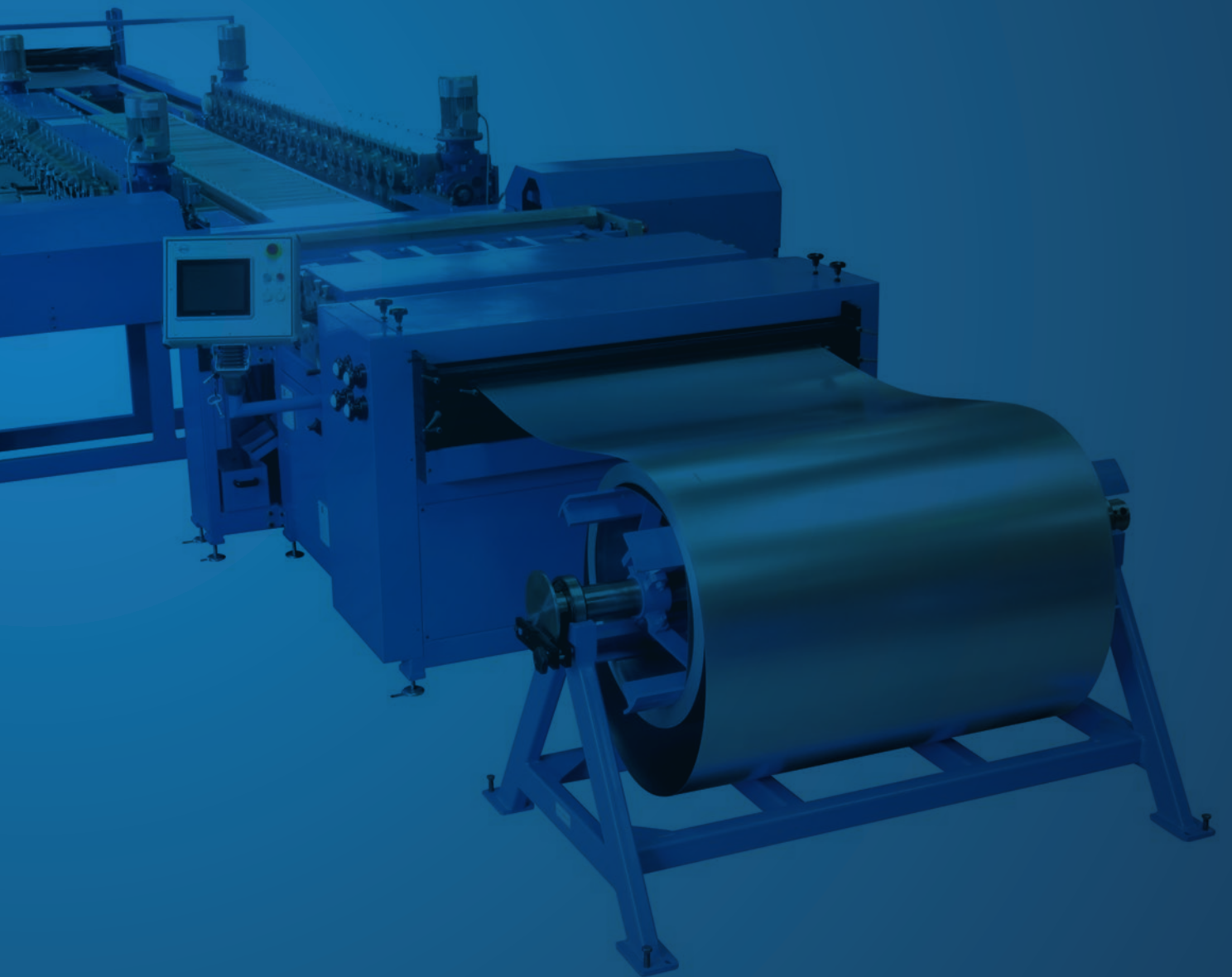
- Deeper troubleshooting and software update for your machine (Internet access required)



# SPIRO® TUBEFORMER LEGACY

- 1956** ● **1956** Tubeformer 300  
**1957** Tubeformer 200
- 1960** ● **1959** Tubeformer 401  
**1959** Tubeformer 403 B
- 1965** ● **1963** Tubeformer 600
- 1970** ● **1969** Tubeformer 800  
**1971** Tubeformer 700
- 1975** ● **1976** Tubeformer 1600
- 1980** ● **1980** Tubeformer 2002  
**1980** Tubeformer MR  
**1980** Tubeformer JR  
**1982** Tubeformer 3003  
**1984** Tubeformer MRX
- 1990** ● **1989** Tubeformer JRX 1212  
**1990** Tubeformer JRX 1210  
**1992** Tubeformer JRX 1610  
**1994** Tubeformer 2525
- 1995** ● **1996** Tubeformer 1613  
**1998** Tubeformer 1602
- 2000** ● **2002** Tubeformer 2020
- 2005** ●
- 2010** ● **2008** Tubeformer *PRO*  
**2009** Tubeformer *SMART*  
**2013** Tubeformer X-20
- 2019** ● **2017** Tubeformer 1602 *modular edition*  
**2019** Spiro® Connect for Tubeformer 1602/2020
- 2021** ● **2021** Tubeformer 2020 High speed edition







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**Spiral-Helix**

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Bensenville IL. 60106  
USA

Phone +1 224 659 7870  
info@spiral-helix.com  
www.spiral-helix.com



## REAL VALUE

**Spiro® In-house Design**

**CE-Certified and EMC directive:**

Compliance verified

**Patented Solutions**

**Spare Parts:** 20 year availability

**2 Year Warranty**

**Support:** Whenever, wherever, forever.

**Know How:**

More than 60 years experience.

**MACHINES – info@spiro.ch**

Spiro® can provide you with a complete set of superior quality machines for the production of air duct systems.

**SERVICES – service@spiro.ch**

Spiro® has the experience, in depth knowledge, support and aftermarket services that ensure your production is continuous and efficient.

**SPARE PARTS – parts@spiro.ch**

Spiro® offers an extensive range of quality spare parts and consumables. Consult our spare parts catalogue or website for a selected choice.

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